

CLAIMS:

- 1 1. A method for obtaining and maintaining storage information related to storage
2 characteristics of a table in a database, comprising:
3 baselining a table contained in the database, wherein the storage information is obtained;
4 making an entry into a transaction log, wherein the entry contains the storage
5 information;
6 retrieving the storage information from the transaction log; and
7 periodically updating the storage information by monitoring subsequent entries in the
8 transaction log.
- 1 2. The method as recited in claim 1, further comprising:
2 locking a particular table to be baselined, thereby preventing modifications of the
3 particular table;
4 making an entry into the transaction log that the particular table is to be baselined;
5 preparing a storage area to receive the storage information for the particular table; and
6 unlocking the particular table after it is baselined, wherein access to the particular table is
7 restored.
- 1 3. The method as recited in claim 2, further comprising:
2 sending the storage information to a requesting entity, wherein a portion of the storage
3 information is row identifications; and
4 deleting the row identifications, wherein the requesting entity maintains the row
5 identifications.
- 1 4. The method as recited in claim 3, wherein the periodically updating step includes adding
2 row identifications to the storage information when a first particular entry in the transaction log
3 indicates a new chained row, and removing row identifications from the storage information
4 when a second particular entry indicates a chained row has been removed.

1 5. The method as recited in claim 1, wherein the storage information includes information
2 reflecting a block count, number of rows, average row length, average free space, and number of
3 chained/migrated rows in the table.

1 6. The method as recited in claim 1, wherein a function native to the database performs the
2 baselining step, an initial routine performs making an entry steps, and a monitoring routine
3 performs the retrieving and periodically updating steps.

1 7. The method as recited in claim 1, further comprising repeating the baselining and making
2 an entry steps for additional tables as specified by a user.

1 8. A computer system, containing a database, that executes a database system program for
2 managing data contained in the database, and a storage information program that computes and
3 monitors storage information for the database, comprising:

4 a processor; and

5 memory units, electrically connected to the processor, wherein the database system
6 program directs the processor to retrieve portions of the database from the memory units for
7 manipulation by the processor, and the storage information program directs the computer system
8 to operate in a mode of operation to compute and monitor the storage information, wherein

9 a table contained in the database is baselined by the database system program, wherein
10 the storage information is obtained;

11 an entry into a transaction log is made, wherein the entry contains the storage
12 information; and

13 the monitoring routine retrieves the storage information from the transaction log, and
14 periodically updates the storage information by monitoring subsequent entries in the transaction
15 log.

1 9. The computer system as recited in claims 8, wherein the compute and monitor mode of
2 operation further includes:

3 locking a particular table to be baselined, thereby preventing modification to the
4 particular table;

5 making an entry into the transaction log that the particular table is to be baselined;

6 preparing a storage area to receive the storage information for the particular table; and

7 unlocking the particular table after it is baselined, wherein access to the particular table is
8 restored.

1 10. The computer system as recited in claim 9, wherein the compute and monitor mode of
2 operation further includes:

3 sending the storage information to a requesting entity, wherein a portion of the storage
4 information is row identifications; and

5 deleting the row identifications, wherein the requesting entity maintains the row
6 identifications.

1 11. The computer system as recited in claim 10, wherein the compute and monitor mode of
2 operation further includes the monitoring routine adding row identifications to the storage
3 information when a first particular entry in the transaction log indicates a new chained row, and
4 removing row identifications from the storage information when a second particular entry
5 indicates a chained row has been removed.

1 12. The computer system as recited in claim 8, wherein the storage information includes
2 information reflecting a block count, number of rows, average row length, average free space,
3 and number of chained/migrated rows in the table.

1 13. The computer system as recited in claim 8, wherein the database system program is a
2 database system program produced by Oracle Corporation.

1 14. The computer system as recited in claim 8, wherein the compute and monitor mode of
2 operation further includes baselining each table in the database, and making an entry into the
3 transaction log for each table baselined.

1 15. A computer system, containing a database, that executes a database system program for
2 managing data contained in the database, and a storage information program that computes and
3 monitors storage information for the database, comprising:

4 means for processor information;

5 means for storing information, electrically connected to the processor;

6 means for baselining a table contained in the database, wherein the storage information is
7 obtained;

8 means for making an entry into a transaction log, wherein the entry contains the storage
9 information;

10 means for retrieving the storage information from the transaction log; and

11 means for periodically updating the storage information by monitoring subsequent entries
12 in the transaction log.

1 16. The computer system as recited in claims 15, further comprising:

2 means for locking a particular table to be baselined, thereby preventing modification of
3 the particular table;

4 means for making an entry into the transaction log that the particular table is to be
5 baselined;

6 means for preparing a storage area to receive the storage information for the particular
7 table; and

8 means for unlocking the particular table after it is baselined, wherein access to the
9 particular table is restored.

1 17. The computer system as recited in claim 16, further comprising:

2 means for sending the storage information to a requesting entity, wherein a portion of the
3 storage information is row identifications; and

4 means for deleting the row identifications, wherein the requesting entity maintains the
5 row identifications.

1 18. The computer system as recited in claim 17, further comprising means for adding row
2 identifications to the storage information when a first particular entry in the transaction log

3 indicates a new chained row, and means for removing row identifications from the storage
4 information when a second particular entry indicates a chained row has been removed.

1 19. The computer system as recited in claim 15, wherein the storage information includes
2 information reflecting a block count, number of rows, average row length, average free space,
3 and number of chained/migrated rows in the table.

1 20. The computer system as recited in claim 15, wherein the database system program is a
2 database system program produced by Oracle Corporation.

1 21. The computer system as recited in claim 15, further comprising means for baselining
2 each table in the database, and means for making an entry into the transaction log for each table
3 baselined.